

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/002094

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F16D 3/52

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F16D, F16F, F16H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

CANADIAN PATENT DATABASE

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

ESPACENET, DELPHION/DERWENT:

Torsion, Helical, Spring, Stop, Boss, Limiter, Decoupler, Connector, Clutch, Pulley, Vibration, Damper,

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No(s). |
|-----------|------------------------------------------------------------------------------------|--------------------------|
| A, P | WO 2004/011818 (JANSON et AL) 05.02.2004 | 1-22 |
| A | US 6,044,943 (BYTZEK et. AL) 04.04.2000 | 1, 12 |
| A | US3,618,730 (MOULD) 09.11.1971 | 1, 12 |

[] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

- * Special categories of cited documents :
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "X" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search
09 February 2005 (09-02-2005)

Date of mailing of the international search report
23 March 2005 (23-03-2005)

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/CA2004/002094

| Patent Document Cited in Search Report | Publication Date | Patent Family Member(s) | Publication Date |
|----------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| WO2004011818 | 05-02-2004 | NONE | |
| US6044943 | 04-04-2000 | BR9509334 A CA2202534 A1 DE69509399D D1 DE69509399T T2 EP0782674 A1 ES2133809T T3 GB9420741D D0 JP10509497T T US6044943 A WO9612122 A1 | 27-01-1998 25-04-1996 02-06-1999 04-11-1999 09-07-1997 16-09-1999 30-11-1994 14-09-1998 04-04-2000 25-04-1996 |
| US3618730 | 09-11-1971 | NONE | |

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